

# Exploring Students' Attitudes Towards Various Illicit Substance Use in Relation to the UK Drug Classification System

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Dissertation: 6005LAWCJ

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Word Count: 10036

This dissertation is submitted in partial fulfilment of the requirements for the degree of BSc (Hons) Forensic Psychology and Criminal Justice in Liverpool  
John Moores University

7<sup>th</sup> April 2017

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## **Declaration**

I certify that all material in this dissertation which is not my own work has been fully identified and acknowledged.

*I further declare that no part of this dissertation has been previously submitted and accepted for any degree, and is not concurrently being submitted in candidature for any other degree.*

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## **Acknowledgments**

*I would like to take this opportunity to thank those who have helped me undertake this project and see it through to the very end. In particular, Robert Hesketh and Sally Woods, for their continued support throughout the year and valuable feedback which kept me on track.*

*I would also like to give a special thanks to my personal tutor, Rachael Steele, for her continuous both in and out of academia and without whom this project would have fallen apart in its earliest stages.*

*In addition, I would like to thank everyone who took the time to complete the questionnaires for this study, their contributions were crucial for this project to succeed.*

*Finally, I would like to thank my course mates, especially Mari Williams, for the reassurance they have provided throughout the year on this and all other projects, they have been a major factor in my success up to this point.*

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## Abstract

**Aim:** The current study aims to investigate students' attitudes towards the use of various illegal drugs in relation to the classification system in the UK. **Background:** Though studies of this nature exist in other countries (Bullock, 2004), no such research has been conducted in the UK to date. Thus far, research has focussed on drug use prevalence rates and attitudes towards drug use (Bryan, Moran, Farrell, & O'Brien, 2000; Home Office, 2016; Ormston et al., 2010) or more recently, and slightly more relevant to the current study, whether drug harm is actually related to the current classification system in the UK (Morgan et al., 2009; Nutt et al., 2007). However, these studies fail to take into account whether the participants agree with the current classification system. Therefore, this research was deemed important and necessary to provide insight into field not previously investigated in the UK. **Method:** This mixed design study recruited 100 undergraduate students via opportunity sample from the two university libraries. The researcher decided to use self-report questionnaires to gather data for this investigation, as they were considered most economical. For this investigation, a 12-item questionnaire with four scenarios was designed to assess different factors relating to participants attitudes of drug harms, acceptance and the classification system. **Results:** There was a significant negative moderate correlation between perceived drug harm and preferred drug class ( $\rho = -.424$ ,  $p < .001$ ) showing that the more harmful a drug was perceived to be, the higher its preferred class was amongst participants. However, perceived harm was not significantly related to the actual classification of a drug ( $\rho = -.207$ ,  $p > .05$ ). Support for cannabis being the most accepted drug was found ( $\chi^2(2) = 4.84$ ,  $p < .05$ ), as although there was still a statistically significant association between this drug and scores for acceptance, it is less significant than all other drugs and answers were much less extreme than in all other drug conditions. Findings revealed participants preferred classification was significantly moderately correlated with actual drug classification ( $\rho = .476$ ,  $p < .001$ ). Finally, mephedrone was not significantly associated with perceived harm ( $\chi^2(3) = 6.52$ ,  $p > .05$ ). **Discussion:** The lack of a significant relationship between perceived drug harm and actual drug class supports for previous research (Morgan et al., 2009; Nutt et al., 2010). Participants were more accepting of cannabis than other drugs, which supports survey data from the Home Office (2016). Findings from Corazza et al. (2014) were not supported by the current study, though this may have been due to poor knowledge on mephedrone.

Future research should focus on recruiting larger sample size from various educational backgrounds, including more drugs, and establishing the effect of normalisation (Parker et al., 2002). That said, due to the lack of any research into this field, any further investigation will provide valuable data, for future studies to be based on.



## Chapter 1: Introduction

In the UK, drugs are categorised according to the harm they are perceived to cause, both to the individual and to society (Frank Advice, 2014). The Misuse of Drugs Act (1971) (MDA) outlines the drugs contained in each class; drugs included in a higher class (class A) are deemed to be more harmful overall than drugs in a lower class (class C), and the penalties for possession or distribution of these drugs reflect this (Gov.uk, 2017). In addition to this, drugs are also divided between five schedules outlined by The Misuse of Drugs Regulations (2001) (MDR). Drugs are placed into higher schedules (schedule one) if they are deemed to pose a high risk for abuse with little to no medicinal value, whereas drugs with great medical potential and lower risk for abuse will be placed in lower schedules (schedule five). However, numerous studies suggest the MDR may be outdated, by providing evidence for the therapeutic applications of certain drugs in schedule one (Das, Barnwal, Ramasamy, Sen, & Mondal, 2016; Turri et al., 2016; Vouga et al., 2015).

Similarly, Nutt, King, Saulsbury and Blakemore (2007) found that despite the MDA claiming to be based on harm, there was no correlation between a drug's harm and its corresponding classification. Although these findings are based on professional opinions, another study determined that drug users held remarkably similar views (Morgan, Muetzelfeldt, Muetzelfeldt, Nutt & Curran, 2009). Because these views are so similar and are apparently diametrically opposed to the current classification system, it could be argued that the legislation is in need of review. That said, these studies do not take into account the views of the public, who are likely to have less exposure to drugs than both of the populations included in the aforementioned studies.

This is where the current study aims to address a gap in the literature, by targeting a student population to gauge their attitudes towards the harms of some of the drugs used in previous studies (Morgan et al., 2009; Nutt et al., 2007). No previous studies have been conducted specifically on attitudes towards the appropriateness of the classification system in the UK. Rather, research tends to target general attitudes towards drug use, prevalence rates or knowledge about drugs (Bullock, 2004; Corazza, Simonato, Corkery, Trincas, & Schifano, 2014; Home Office, 2016). The current research, therefore, was considered necessary. This is emphasised when the fact that Bullock (2004) included students' attitudes

towards Swedish drug laws is taken into account; the UK is severely lacking in this area. Neglecting the views of the public on current policy in this fashion undermines the very nature of democracy.

Based on previous findings from previous literature, which will be discussed in chapter 2, the hypotheses for this study were as follows:

H<sub>1</sub>: Drugs considered more harmful will be associated with a higher preferred drug class

H<sub>2</sub>: Perceived drug harm will not be related to actual drug class

H<sub>3</sub>: Participants attitudes will be most accepting towards cannabis

H<sub>4</sub>: There will be a significant difference between participants preferred drug classification and a drugs actual classification

H<sub>5</sub>: Mephedrone will not be considered safer than illicit substances

Following on from this brief introduction, the next chapter will discuss the current literature, or lack thereof in this instance, surrounding this topic. It will highlight the key legislation and processes that occur when such legislation is being generated. Some controversies will also be touched upon to bring attention to the clear inconsistency between policy and practice. The chapter will also lead logically into research directly relevant to the current study, showing how the researcher was lead to conduct this study, and why it was thought to be necessary. After the literature review, the methodology chapter will guide readers through the steps that were taken to actually conduct this research. It will outline the design of the study and sampling technique used to recruit participants; the materials used; the procedure followed; and the ethical issues that were considered when the study was being carried out. Following this, the results chapter will interpret the analysis and highlight any cases of inferential tests revealing significant findings. Finally, the discussion will bring the findings from the current study back into context and discuss their implications. In addition, limitations and directions for future research will be considered before a concluding chapter.

## Chapter 2: Literature Review

*“We have concluded that the current classification system is not fit for purpose and should be replaced with a more scientifically based scale of harm”* – House of Commons Science and Technology Committee (2006)

### *Section 2.1: The Politics of Policy*

#### 2.1.1: The Misuse of Drugs Act 1971

The misuse of drugs act (1971) (MDA) is a piece of legislation which allows the government to control illegal substances. Along with the inception of this act came the formation of an appropriate independent advisory board: The Advisory Council on the Misuse of Drugs (ACMD) (Gov.uk, 2016). It is the responsibility of this council to assess recent scientific evidence, as well as conduct its own inquiries, pertaining to various drugs and use this to assist the government in determining which drugs need to be controlled and the classes into which such drugs should be placed (Gov.uk, 2016). The class system it uses denotes the amount of harm each drug is deemed to cause, to both the individual and society (Frank Advice, 2014). For example, substances in class A such as cocaine, ecstasy (MDMA) and heroin are deemed as some of the most harmful drugs and thus carry the greatest penalty for possession or distribution (Frank Advice, 2014). Classes B and C follow the same structure but contain different substances depending on their potential for abuse and the harm associated with such abuse (Frank Advice, 2014).

#### 2.1.2: The Misuse of Drugs Regulations 2001

In addition to the MDA, in 2001 the Misuse of Drugs Regulations (MDR) introduced schedules into which controlled substances must be placed. Like the class system used by the MDA, these schedules also account for the drugs' potential to cause harm when misused. However, unlike the class system in the MDA, the schedules in the MDR also consider the medicinal and therapeutic value of the drugs (Misuse of Drugs Regulations, 2001). Schedule 1 includes drugs with no therapeutic value with a high potential for abuse, such as cannabis and MDMA (Misuse of Drugs Regulations, 2001). As the schedules ascend, the restrictions

on the substances in that schedule become more lenient, with drugs in schedule five being available over the counter without a prescription (Misuse of Drugs Regulations, 2001).

#### 2.1.3: Temporary Class Drug Orders

For 'legal highs' or novel psychoactive substances (NPS), the government proposed a temporary class drug order (TCDO) in 2010 (ACMD, 2011). This proposal was passed as part of the Police Reform and Social Responsibility Act (2011) and was intended to impose a ban on an as yet unclassified substance for a maximum of 12 months, while the ACMD carried out research to assess the harm of the drug, a process which can take up to six months (Home office, 2011a). After this 12-month period, either the ban is lifted or the drug is placed into one of the categories and schedules outlined in the MDA and MDR respectively (Home Office, 2011a). The government claims that the TCDO also aims to send out a clear public health message about NPS and enable law enforcement to take action against offenders (Home Office, 2011b). The ACMD supported the formation of the TCDO, as at its core, its purpose was to protect the public from potentially harmful substances while appropriate research was conducted (ACMD, 2011). However, the ACMD also highlighted how important the flow of evidence would be in the 12-month period that such substances were banned, in order to give the best advice on classification to the government (ACMD, 2011).

#### 2.1.4: Psychoactive Substances Act 2016

In what may be considered a follow up to the TCDO, the Psychoactive Substances Act (2016) (PSA) is a somewhat blanket ban on any substance not currently controlled under the MDA. It prohibits the production and supply of any psychoactive substance with the exception of those considered legitimate, such as caffeine, alcohol and tobacco for example (DrugWise, 2016a). However, it gives police the power to take a "graded" response to offences, rather than give custodial sentences to offences judged as less serious (DrugWise, 2016a).

#### 2.1.5: Political Arena

The politically charged atmosphere in which policies are made undoubtedly influences the weight given to scientific evidence in policymaking (Kalant, 2010; Monaghan, 2014). An example of the political arena influencing policy, more than the empirical evidence upon which said policy is supposedly based, is the reclassification of cannabis in 2009, when it returned from class B after previously being moved to class C (Monaghan, 2014). The main rationale of the government in making this decision was the

increased potency of cannabis in the years leading up to the decision (Home Office, 2009) and their desire to send a message to the public that cannabis was dangerous (House of Commons Science and Technology Committee, 2006). This is despite advice from the ACMD for cannabis to remain as a class C drug and even against public opinion, which leaned towards the drug remaining in class C or even being totally decriminalised (Home Office, 2009). Indeed, there is no evidence to suggest that a higher classification status of a drug is conducive to facilitating deterrence (House of Commons Science and Technology Committee, 2006), and although the punitive laws have little impact on usage rates, they have considerable implications for the harm caused by drugs (Reuter & Stevens, 2007). In fact, there is even evidence to suggest that in relation to cannabis, raising its classification had the opposite effect, with rates of use taking notable rise that year and only coming back down to a level like before the ban in 2015 (Home Office 2016). Therefore, suggesting the government's aim to send out a clear message in an attempt to reduce cannabis usage rates seems to be a failure.

The reclassification of cannabis also caused David Nutt, then head of the ACMD who held the view that reclassifying cannabis as a class B substance was wrongful, to be sacked by former Home Secretary Alan Johnson (BBC, 2009). This calls into question how independent the ACMD is actually allowed to be and how evidence based the governments' drug policies really are. Views such as this are reinforced when the fact that the ACMD has no budget of its own is considered, resulting in the supposed independent body being heavily dependent on the Home Office for funding (House of Commons Science and Technology Committee, 2006). Further, the way in which the ACMD conducts its deliberations has sparked concern, as they are reluctant to make details of this process public. Although they argue this is due to some information being deemed inappropriate for the public domain, very little of the deliberating process includes this information and it could easily be redacted if transcripts were to be published (House of Commons Science and Technology Committee, 2006).

Some members of the ACMD, such as Dr Polly Taylor and Eric Carlin have even questioned its independence and ability to conduct impartial deliberations, as shown by the controversy of the haste in which mephedrone was classified under the MDA (BBC, 2010a). Mephedrone was legal until the government introduced a ban on it and all cathinone derivatives in April 2010 (BBC, 2010a). However, this ban was passed without the ACMD being given much opportunity to consider how it would affect young people's behaviour,

with Eric Carlin stating that he did not even see the final the final report on mephedrone and that the ACMD's decision was based on political and media pressures (BBC, 2010b). After the decision to ban mephedrone, these two members resigned (BBC, 2010a); a decision which Eric Carlin had previously considered due to the sacking of former head of the ACMD, David Nutt (BBC, 2010b). Though since this event the TCDO has been introduced, which addresses, and to a degree, solves this issue.

## *Section 2.2: Drugs: Their Effects and Uses*

### 2.2.1: Mephedrone

Mephedrone is a synthetic cathinone that, for a time, was legal in the UK and became very popular (Corazza et al., 2014; McElrath & O'Neill, 2011). As TCDO's were not introduced when mephedrone became popular, there was a quick decision made to control the substance under the MDA. There is evidence that this decision was justified, as mephedrone has been shown to be treated similarly to other drugs of abuse (Motbey et al., 2013) and can result in side effects including: chest pain, heart palpitations, tachycardia, vasoconstriction, and convulsions (James et al., 2010; Wood et al., 2010a). These sympathomimetic effects are not dissimilar to those caused by MDMA (Wood et al., 2010b) and suggests possible serotonin syndrome (Garrett & Sweeney, 2010); which can also be caused by MDMA and be potentially fatal (Parrott, 2002). The similarity between side effects is unsurprising though, given the positive effects of the two drugs share a striking resemblance (McElrath & O'Neill, 2011) they are likely to share a somewhat similar mechanism of action (Baumann et al., 2011; Dybdal-Hargreaves, Holder, Ottoson, Sweeney, & Williams, 2013). Having said this, maybe more research into toxicity is needed, as one study found that mephedrone and MDMA administered to rats intermittently over a three-week period induced acute effects such as hyperactivity and impaired novel object discrimination, but did not cause neurotoxicity (Shortall et al., 2013).

Additionally, there does seem to be evidence to contradict the drugs classification. For example, there is evidence to suggest that most users report a positive experience with the drug but more importantly, that the legal classification of the drug had very little impact on their decision to use the drug. In the same vain, none of the participants reported a change in beliefs about safety of the drug based on its legal classification (McElrath & O'Neill, 2011). If it was the case that the law made no difference to people's habits of taking this drug, it could be argued that the law is ineffective. Having said this, there is evidence to suggest that the law has reduced mephedrone related harm, as one study reports a significant

fall in the number of cases related to acute mephedrone toxicity in the UK after the drug was banned in 2010 (Wood, Greene, & Dargan, 2011). Still, there is even some evidence to suggest that mephedrone may have some therapeutic value. For example, a study conducted by Vouga et al. (2015) found that one of the enantiomers of mephedrone (specifically S-MEPH) might be useful for treating addictive behaviours caused by cocaine dependency. Though it should be noted that this study was conducted on flatworms, so may not necessarily be generalizable to humans, so more research would be needed before a change of class or schedule would be feasible.

### 2.2.2: Cannabis

Cannabis is the most commonly abused illicit drug (Home Office, 2016). However, there are concerning contrasts between legislation and research around this substance. Contrary to its own guidelines, the MDR lists cannabis as a schedule one substance. Various studies have shown the medical value of cannabis both for physical (Pertwee, 2012; Turri et al., 2016; Wallace, Marcotte, Umlauf, Gouaux, & Atkinson, 2015) and mental health conditions (Greer, Grob, & Halberstadt, 2014; Loflin, Babson, & Bonn-Miller, 2017<sup>1</sup>; Walsh et al., 2017). This type of research has even influenced policies in other countries. In America for example, cannabis has been legalised for medicinal use in 28 states (ProCon, 2016), with four states (Alaska, Washington, Oregon and Colorado) even legalising recreational use since 2012 (Hall & Lynskey, 2016). One theory prevalent in society is that cannabis can act as a gateway drug, leading to more serious drug use in the future (Hall & Lynskey, 2005); though it is worth considering tobacco can also act as a gateway drug (Fergusson & Boden, 2014). Still, this doesn't seem to be the case, as in Scotland, 70% of people who used cannabis believed that occasionally using or even trying cocaine was "seriously wrong" (Ormston, Bradshaw, & Anderson, 2010). Moreover, some researchers argue that on balance, legalising cannabis would be beneficial to public health, predominantly because of an expected reduction in alcohol related crime (Anderson & Rees, 2013).

### 2.2.3: LSD

LSD is a powerful hallucinogen (DrugWise, 2016b) which has seen a shift in public attitude in recent years in terms of perceived risk (Johnston, O'Malley, Miech, Bachman, & Schulenberg, 2017). Considerably dissociated with the party scene, users mainly seem to

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<sup>1</sup> In the Loflin, Babson and Bon-Miller (2017) study, Drs Babson and Bon-miller report receiving payment for consultation from pro cannabinoid pharmaceutical companies. However, they state these companies did not fund anything to do with the design or execution of the study.

take the drug to bring about a change in perception of themselves and the world around them (Prepeliczay, 2002). There is also evidence to suggest the usefulness of LSD in a therapeutic setting (Das et al., 2016) for treating alcohol addiction (Morgan, McAndrew, Stevens, Nutt, & Lawn, 2017) and anxiety (Gasser et al., 2014), and increasing neuroplasticity (Nichols & Sanders-Bush, 2002) which promotes learning and healthy cognitive ageing (Vance, Roberson, McGuinness, & Fazeli, 2010). Further, MDMA assisted psychotherapy has yielded promising results in the treatment of chronic post-traumatic stress disorder (PTSD) without any negative side effects typically associated with the drug, when administered in a controlled, clinical setting (Oehen, Traber, Widmer, & Schnyder, 2012). Moreover, when participants with PTSD were asked to recall their best and worst memories, there is evidence to suggest that MDMA caused positive memories to be recalled with more intense emotion and negative memories to be viewed as less negative (Curran et al., 2016).

#### 2.2.4: Cocaine

Cocaine can come in many forms, most commonly powder, and is second only to cannabis in terms of usage amongst adults, with use taking a sharp rise among young adults between 2013 and 2015 (Home Office, 2016). It's status as a class A substance is perhaps the least controversial (Morgan et al., 2009) as it has been shown to significantly alter cerebellar activity pertaining to addiction (López-Pedrajas et al., 2015). Furthermore, there is strong evidence linking cocaine to neurotoxic damage via its effect on the dopamine transporter DAT, which can lead to accelerated neurodegeneration (Pereira, Andrade, & Valentão, 2015) and even psychosis (Roncero et al., 2016). Despite this, cocaine remains a schedule two substance under the MDR available on prescription for addicts (NICE, 2017).

Given the evidence for the therapeutic and medicinal value for mephedrone, cannabis and LSD, it appears they should not be classed as schedule one substances; especially when cocaine is considered a schedule 2 substance, despite it having considerably less therapeutic value. The apparent discrepancies between the statements made by legislation and the reality of that legislation in practice may be partially the cause for the UK public being in favour of a drug policy reform in 2013, particularly the legalisation of cannabis (Transform, 2017).

### *Section 2.3: Putting opinion into context: Public, users, and expert opinions*

Many studies and reports have been published assessing prevalence rates for drug use and public opinion on related issues. For example, Bullock (2004) assessed students'



attitudes towards drug use across three universities in Sweden. Findings showed that most students agreed that drinking alcohol was a normal part of student life, but only 7% felt similarly about experimenting with drugs. Additionally, although those who had used illegal drugs were more likely to say that Sweden's drug laws were too harsh (16.4%) compared to those who had never used such substances (3.2%) a large proportion of both each group were indifferent on the matter (38.5% and 37.5% respectively). It is interesting that so many students had little opinion about Sweden's drug laws, especially given that they are particularly punitive and place increased emphasis on targeting young people early in an attempt to coerce them to never try illegal drugs, particularly cannabis (Tham, 2009).

In the UK, student's attitudes towards NPS have been assessed through an anonymous online survey. This study found that 81.8% of students were correctly aware of 'legal highs', with 31.4% reporting using such substances at least once in their life. Amongst this group, mephedrone emerged as the most commonly used drug, with 41.4% of respondents reporting taking it. Perhaps the most important finding though, is that less than half of the respondents claimed that the classification of the drug had any impact on their decision to take it. Further, 74.2% did not believe 'legal highs' to be safer than their illegal counterparts (Corazza et al., 2014). Although there are potential implications for policymaking related to these findings, a noteworthy point is that although published in 2014, the data for this study was collected at the end of 2010. This is significant as the ban on mephedrone had not been in place very long so it is perhaps less surprising that it emerged as the most common NPS than if the data had been collected closer to the time of publication. Still, the results show how popular this drug was; suggesting research into it was warranted.

In addition to the law seeming ineffective at altering people's judgements on the safety of substances, evidence suggests experts in the field disagree rather significantly with the current classification system in the UK. Although the system is supposed to be based on evidence from empirical research, there are studies to suggest that this is not the case. For example, Nutt et al. (2007) conducted a study to assess experts' attitudes towards different aspects of harm associated with various drugs. Findings showed that there was no significant correlation between the scores for harm of a drug and the classification it had been given by the government. In addition, a multicriteria decision analysis supported the findings of a low correlation between harm and the class of a drug (Nutt, King & Phillips, 2010). Therefore, this suggests that the drug classification system in the UK should be considered for revisions. Furthermore, there is evidence to support this study from drug users themselves. Morgan et

al. (2009) used the questionnaire developed by Nutt et al. (2007) to assess the views about drug harm, that drug users held themselves. They were given the same list of substances to rate as the experts, and findings showed a very high positive correlation between experts and users views. The discrepancies between some of the views on particular drugs may be able to be explained through slightly different understandings of the substances. For example, users rated ecstasy as more harmful than expert's. This may be due to the difference between pure MDMA, to which the experts may be referring, and ecstasy bought from dealers, to which users may be referring. Even if the experts were referring to ecstasy bought from dealers, it could still be the case that users are more aware of these potential harms as they have more experience with the drug in that situation. Therefore, this suggests that the users are educated on what they are taking, giving more power to the argument for the drug classification system in the UK to be changed. The fact that the views of drug users in this study disagree so strongly with the classification system could be argued to reinforce a point made by David Nutt: That dependant users are unlikely to give any consideration to the class of drug they are using (House of Commons Science and Technology Committee, 2006).

In terms of public attitudes, these appear to differ in different locations. For example, a survey conducted in Ireland suggested that the public believe drugs to be a prevalent issue in society on a local and national scale, though two thirds of respondents were in favour of harm reduction strategies such as needle exchange stations, providing abstinence was the end goal for the individual using the service. Additionally, 70% of people believed addicts convicted of petty crimes should be offered help rather than given a custodial sentence. Further, interestingly, only 24% agreed that cannabis should be legalised (Bryan, Moran, Farrell, & O'Brien, 2000). This is contrary to findings in the UK that suggested much of the publics' attitudes were more accepting of the drug (Home Office, 2009). In Scotland, the support for legalising cannabis was greater than in Ireland at the time of the Irish survey (37% compared to 24%) however, by 2009 support had dropped to 24% (Ormston et al., 2010). In similar fashion, Scottish views tended to be more punitive than Irish, as support for harm reduction fell to just 50% in 2009. Scottish people also deemed cocaine use to be very serious, even if it was only occasional use and, particularly interestingly, even if the respondent had reported using cannabis (Ormston et al., 2010). In England, despite the publics' opposition to reclassifying cannabis as a class B substance (Home Office, 2009) attitudes now seem more in line with those of Ireland and Scotland, with 36% believing

taking cannabis was acceptable (Home Office, 2016). Conversely, only 9% of the population believed taking cocaine was acceptable (Home Office, 2016). Interestingly, the number of people who think taking cannabis is acceptable is higher than the number of people who use cannabis across all age ranges; cocaine on the other hand has the opposite relationship in some age categories, particularly those aged 25-44 (Home Office, 2016).

### *Section 2.4: Conclusion*

The MDA, MDR and TCDO are some of the most important pieces of legislation for drug control. The MDA claims that the classification system is based on empirical research and drugs are categorised accordingly in relation to their potential for harm (Frank Advice, 2014). However, there is evidence to suggest that this is not the case (Morgan et al., 2009; Nutt et al., 2007; Nutt et al., 2010). The MDR also claims that drugs are placed into schedules according to their potential for abuse and therapeutic value (Misuse of Drugs Regulations, 2001). Yet there is considerably more evidence for a more diverse therapeutic value of some drugs in schedule one (Morgan, McAndrew, Stevens, Nutt, & Lawn, 2017; Turri et al., 2016) than some drugs in schedule two (NICE, 2017). The policymaking process takes factors other than science into account, such as public perception (House of Commons Science and Technology Committee, 2006) due to the political arena (Monaghan, 2014). Although, this has appeared to be selective in order to fit with current agendas (Home Office, 2009) despite a lack evidence that manipulating the classification system results in a change in perceptions or a lower prevalence rate (Home Office, 2016; House of Commons Science and Technology Committee, 2006). The general public opinion across the UK tends to be that cannabis is the most acceptable illegal substance to use, though still only 28% on average are fully accepting of its use. Cocaine and other drug use is looked upon with much less leniency, though there is still clear support for harm prevention measures in such cases (Bryan et al., 2000; Home Office, 2016; Ormston et al., 2010). Despite this research into attitudes towards the acceptance of drugs, there appears to be a lack of research into the publics' opinion on how well the current classification system serves its purpose. If the attitudes of the public were at a similar disparity with the current law and more in line with those of experts and users, it would add more power to the argument for a drug policy review.

## Chapter 3: Method

### *Section 3.1: Design*

This was a mixed design study. The researcher decided that self-report questionnaires would be the most economical method to gather data for this study. The independent variables (IV) and dependent variables (DV) were as follows:

H<sub>1</sub>: DV1 = Drug harm, DV2 = Preferred drug class

H<sub>2</sub>: DV1 = Drug harm, DV2 = Actual drug class

H<sub>3</sub>: IV = Drug type (4 levels), DV = Acceptance

H<sub>4</sub>: DV1 = Preferred drug class, DV2 = Actual drug class

H<sub>5</sub>: IV = Drug type (4 levels), DV = Perceived harm

Questions were formulated in order to test these hypotheses and included in the 12-item questionnaire used in this research.

### *Section 3.2: Participants*

This study used a mixed design. The participants in this study ( $n=100$ ) were undergraduate students aged between 18 and 44 ( $M=21.14$ ,  $SD=2.92$ ) from LJMU recruited via an opportunity sample, as this was determined to be the most economical when considering factors such as time constraints and ease of access to students. Though this allowed for the relatively quick collection of data, there are issues associated with this sampling technique, such as researcher bias and a less representative sample (McLeod, 2014). Despite this, efforts were made to make the sample as representative as possible. The researcher gathered information from students in lecture theatres and, in an attempt to gain a more representative sample in terms of gender, the Aldham and Avril Roberts libraries. This did not work as planned, as the number of male participants ( $n=33$ ) was less than half that of female participants ( $n=67$ ). As there were four conditions in this study, an appropriate number of students per condition was decided upon to allow meaningful statistical analyses to take place; this number was deemed to be 25 per condition, therefore, resulting in 100 participants overall.

*Table 1. Gender frequency and drug type cross tabulation*

		<b>Cocaine</b>	<b>Cannabis</b>	<b>Mephedrone</b>	<b>LSD</b>	<b>Total</b>
<b>Frequency</b>		25	25	25	25	100
<b>Gender</b>	<b>Male</b>	7	8	7	11	33
	<b>Female</b>	18	17	18	14	67

### *Section 3.3: Materials*

Questionnaires were used to gather information from the participants involved. Self-report questionnaires are incredibly practical and allow for the quick collection of data (Paulhus & Vazire, 2007). That said, these measures are subject to social desirability bias and a number of other response complications, such as extreme responding and acquiescent responding (Paulhus & Vazire, 2007). Though the latter two are unlikely to apply to the majority of the responses in this study, social desirability bias may have had a real impact, as although the researcher left participants alone to complete questionnaires, they were still surrounded by their peers. There were four vignettes, each focussing on a different drug, preceding the questions on the questionnaire (see appendices 1-4). Vignettes were chosen because they offer an opportunity to create a scenario upon which questions can be based, acknowledging and reflecting the real-world context these situations often occur in (Finch, 1987). This was of particular use to this study due the potentially unethical nature of the topic; if students were being asked about their attitudes towards the drugs in relation to their own use, there is a higher likelihood of the questionnaire causing unintentional distress. However, vignettes distance the participant slightly from the scenario (Finch, 1987), allowing for this issue to be avoided to some extent. Furthermore, ‘normalisation’ may occur depending on the scenario a drug is used in (Parker, Williams, & Aldridge, 2002). Participants would first read these vignettes and then proceeded to answer the 12 items on the questionnaire. Question 1 was simply determining whether the participant had heard of the drug in the scenario they had read, while question 8 was concerned with the means by which the participant had acquired this information. Questions 2-4 targeted participants’ attitudes and beliefs regarding the use of the drug outlined in the vignette at the start of their questionnaire, whereas questions 5-7 investigated awareness of harm caused by taking the drug. Questions 2-7 utilised a 5-point Likert scale (Likert, 1932) to determine these attitudes, with a score of 1 indicating strong negative feelings and a score of 5 representing strong positive feelings. This is, with the exception of question 4, which required only a simple

yes/no response. Items 9 and 10 assessed participants' knowledge and personal opinions of the drug in the scenario they were given in terms of the UK classification system. Finally, questions 11 and 12 aimed to determine students' beliefs surrounding the formation of the drug laws and factors that are considered when they are introduced.

Participants were also given an information sheet (see appendix 5) giving a detailed outline of the study; why it is important; what would be required of them should they opt to partake; and what would happen with their results once collected. Contact information of the researcher, their supervisors, and LJMU's counselling and wellbeing service were also included.

Those who elected to participate received a consent form (see appendix 6). By providing a name and signature the participant acknowledged that they had: Read and understood the information sheet; been given the opportunity to ask any questions about the study; understood what would happen with their data and how it would be stored once it was collected; understood their participation was voluntary; and agreed to take part in the study.

Upon completion of the questionnaire participants were handed a debrief sheet (see appendix 7), thanking them for their time and again outlining the primary aim of the investigation. It was also explained that, in order to keep their information confidential, it would be impossible for their data to be withdrawn once it had been stored, as there would be no way to identify which participant completed which questionnaire. Finally, it restated the researchers email address should anyone involved in the study have further questions.

### *Section 3.4: Procedure*

Students were initially recruited from a level six lecture theatre prior to the commencement of the lecture. The researcher approached the students before the lecturer arrived and asked if they would be willing to participate in the study. Those who agreed were handed an information sheet and consent form; once the consent form was signed, the student received one of the four questionnaires at random. Students were not given a time limit in which they had to complete the questionnaire, nor were they monitored while they answered any questions. After completion and collection of the questionnaires participants were thanked for their time and contribution to the research and given a debrief sheet. As females comprised the majority of this lecture, the researcher repeated these steps at the Aldham Robarts and Avril Robarts libraries on subsequent dates to gather enough

information to allow statistical analyses to be performed. On these occasions, the researcher approached students at their desks and asked if they would be willing to take part in a third-year dissertation study. Those that agreed received an information sheet and consent form. Once this was signed and the participant had no further questions they received one copy of a questionnaire at random. Each participant was told to complete the questionnaire in their own time and, once finished, leave it on their desk for the researcher to collect later on. Participants were then left to complete the questionnaire in the absence of the researcher. Once all the questionnaires had been collected, the researcher inputted the data into SPSS for analysis.

### *Section 3.5: Ethics*

Prior to this study being conducted, to keep in line with the universities ethical guidelines, the researcher was required to submit a research proposal outlining the rationale behind the investigation and the methods to be used within to LJMU's ethics panel for approval. In addition, copies of the vignettes, questionnaires, participant information sheet, consent form, and debrief sheet were also requested by the panel, to assess their suitability for the study.

Once the proposal and materials had been approved (see appendix 8), the researcher began the data collection process. Although the information sheet and consent form highlighted some ethical considerations for the participant and how they would be addressed, the researcher also ensured students adequately understood these issues by verbally explaining them and giving an opportunity to ask any questions. The researcher explained that participation was entirely voluntary and that, should they take part, refusal to answer any question was acceptable and would not affect their rights in any way. Students were also informed that they could withdraw from the study at any point before their data was stored, and were reminded of this and given the opportunity to do so upon the collection of their completed questionnaire and receipt of a debrief sheet. It was also explained that as questionnaires were filled in anonymously, and consent forms were stored separately to completed questionnaires to ensure confidentiality, removal of specific data sets post-storage would be impossible. Although this study was not considered to be intentionally harmful or have particular ability to evoke psychological distress, details of LJMU's counselling and wellbeing services were provided on the information sheet, should any of

those included in the study feel the need to make use of them. Finally, none of the participants in this study were deceived in any way.

## Chapter 4: Results

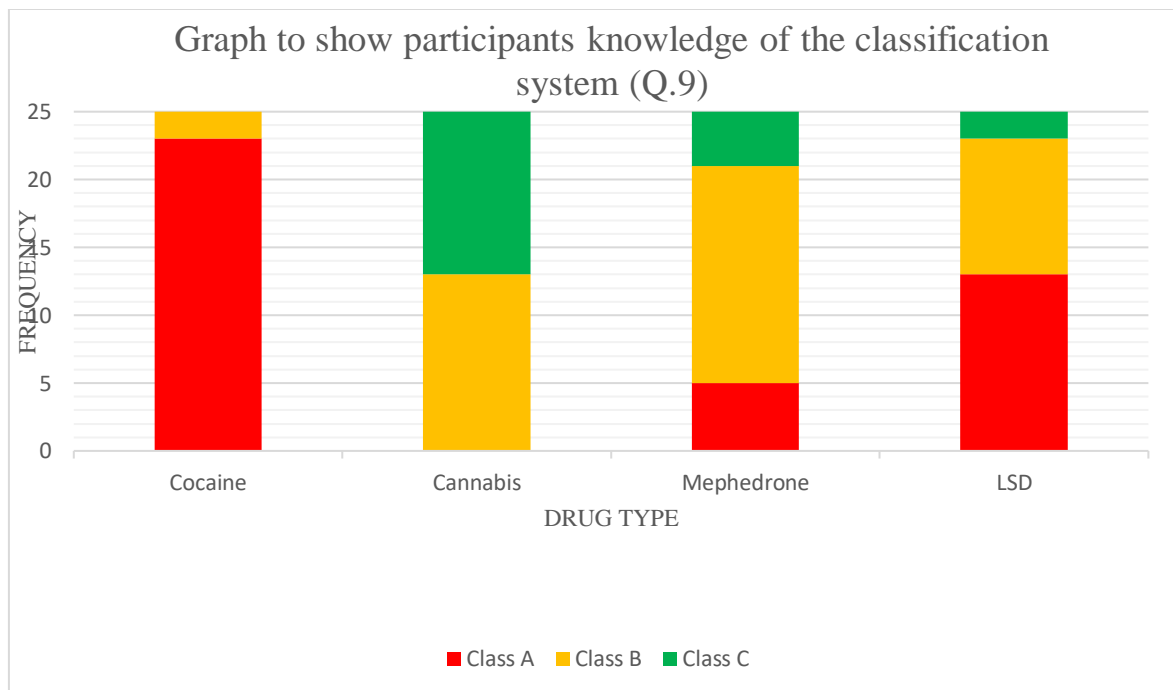
### *Section 4.1: Introduction*

Once all questionnaires had been collected and the data was entered into SPSS, the researcher ran appropriate analysis. This section will focus on the descriptive statistics for the raw data and the inferential tests used to analyse it, to determine whether the experimental hypotheses for the study are supported by the data. Due to the nature of the questionnaire and the responses provided, non-parametric tests were used to analyse the data (Jamieson, 2004).

### *Section 4.2: Descriptive Statistics*

The questionnaires provided the raw data necessary for analysis; this section will show the most common answers with regard to students' views on the classification of the drugs in their scenario.

Figure 1.





As shown by Figure 1, in total, 65% of participants gave a correct answer for the classification of the drug in their scenario. However, there are clear differences between classes. Participants in the cocaine condition had the highest rate of success (92%), followed by those in the mephedrone condition (64%), while participants in the cannabis and LSD scenarios had an equal rate of correct answers (52%).

Figure 2.

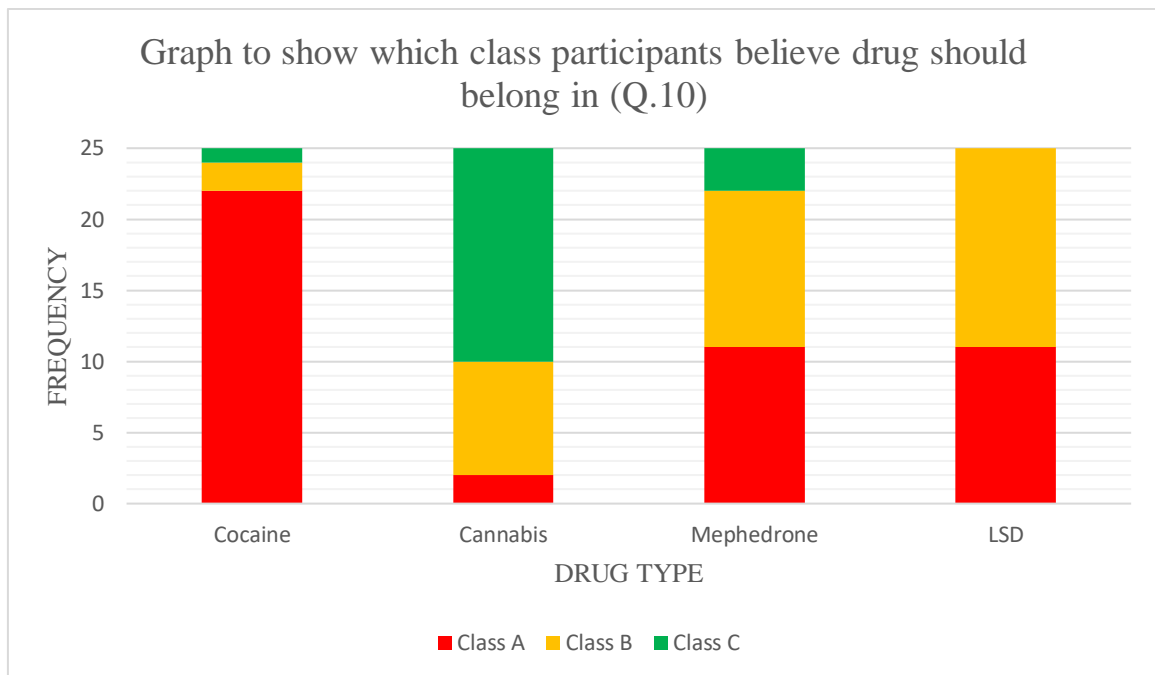
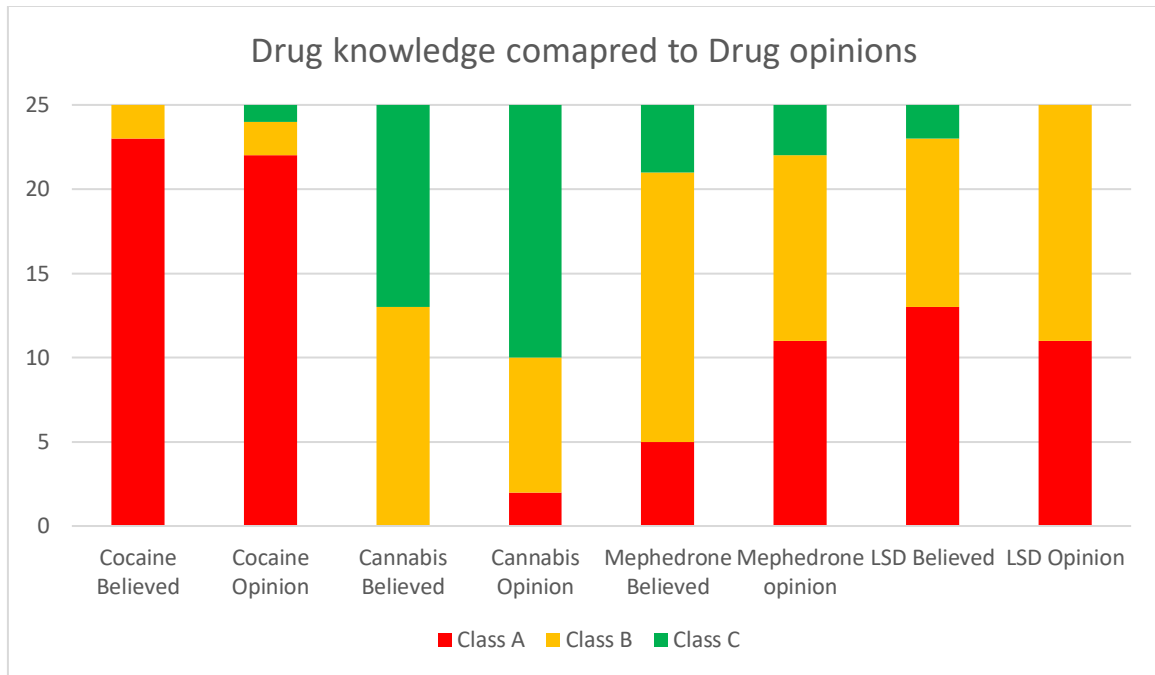


Figure 2 illustrates participants' personal opinion regarding the drug in their scenario, in terms of which class they deem to be most appropriate. Cocaine (mode = Class A, n=22) is the only drug for which the most popular opinion concurred with current legislation. Mephedrone, (multimodal = Classes A&B, n=11) was mainly in support of current legislation (class B) or in favour of raising the drug to class A. Cannabis (mode = Class C, n=15) and LSD (mode = Class B, n=14) seemed to find support for being subjected to more lenient restrictions via a downgraded classification.

Figure 3.



Figures 1 and 2 were combined to create Figure 3. Figure 3 appears to show that participants believe their knowledge regarding the current classification of the drug in their scenario and the class they think that drug ought to belong in are similar overall.

This not only suggests that the classification system is not synonymous with participants' personal beliefs, but also that participants are misinformed about current drugs legislation. This may be surprising as participants report receiving information about drugs from a variety of sources, including official government websites.

There were significant correlations in all conditions between participants concerns regarding use of the drug in the scenario outlined in the vignette and long-term consequences of drug use. Spearman's Rho analysis revealed strong correlations for cocaine, ( $\rho=.716, p<.001$ ) and mephedrone ( $\rho=.621, p<.001$ ), and moderate correlations for cannabis ( $\rho=.523, p<.05$ ) and LSD ( $\rho=.573, p<.05$ ). This suggests that participants who are more concerned about drug use in the scenario described in the vignette are more concerned about potential long-term negative consequences associated with use of the drug. This may reflect a more cautious underlying nature in general.

In terms of accepting attitudes, participants tended to harbour a non-judgemental view towards drug taking behaviour regardless of the type of drug being used (mode = viewed no differently,  $n=64$ ). A chi-squared test revealed that there was no significant association

between lower scores for acceptance of drug use in the scenario and length of time of drug use ( $\chi^2(1)=.035$ ,  $p>.05$ ), suggesting acceptance of drug use in particular settings does not necessarily extend to drug use in general.

### *Section 4.3: Hypothesis testing*

H<sub>1</sub>: Drugs considered more harmful will be related with a higher preferred drug class.

A Spearman's Rho analysis was chosen to analyse data relating to this hypothesis, as, although the class of drug may be considered in terms of categories, they are also essentially ordinal data, as the classes are graded in terms of increasing harm and can be considered similarly to a Likert scale. A significant moderate negative correlation coefficient between concerns relating to drug associated harm and perceived appropriate drug class was revealed ( $\rho=-.424$ ,  $p<.001$ ). However, due to the way the data were entered, the relationship actually provides support for the hypothesis, as a score of one denoted the highest drug class and higher scores for concern showed increased concern. Therefore, this hypothesis can be accepted.

H<sub>2</sub>: Perceived drug harm will not be related to actual drug class

Due to its similarity to the first hypothesis, the same analysis was conducted for this hypothesis. Spearman's Rho revealed a non-significant negative correlation between participants concerns relating to drug harm and actual classification ( $\rho=-.207$ ,  $p>.05$ ). Therefore, the experimental hypothesis can be accepted.

H<sub>3</sub>: Participants attitudes will be most accepting towards cannabis

A Chi-Squared analysis revealed that there was a significant association between drug use and a change in opinion for all drug. However, this association was more significant for cocaine ( $\chi^2(4)=17.60$ ,  $p<.001$ ); mephedrone ( $\chi^2(3)=30.20$ ,  $p<.001$ ); and LSD ( $\chi^2(3)=18.36$ ,  $p<.001$ ) than for cannabis ( $\chi^2(2)=4.84$ ,  $p<.05$ ).

*Table 2. Opinions of drug use descriptive statistics*

<b>Drug type</b>	<b>Mean</b>	<b>Standard Deviation</b>	<b>Minimum</b>	<b>Maximum</b>
<b>Cocaine</b>	2.76	.970	1	5
<b>Cannabis</b>	2.72	.458	2	3
<b>Mephedrone</b>	2.72	.678	1	4
<b>LSD</b>	2.56	.768	1	4

Table 2 shows that although means for all drugs on this measure are similar, there is a much more variation in answers for drugs other than cannabis. This shows that views on cannabis which less extreme than the other drugs, and given that an answer of 3 represented no change in attitude, suggests that cannabis is more accepted than the other drugs included in this study. Furthermore, the length of time or frequency of cannabis use did not affect participants opinions on usage ( $\chi^2(1)=1.00$ ,  $p<.05$ ). As a result of these tests, the experimental hypothesis can be accepted.

H<sub>4</sub>: Participants preferred classification of a drug and the actual classification of that drug will not be related

Results from a Spearman's Rho analysis provided support for the null hypothesis in this instance, as there was a moderate positive correlation between participants preferred drug class and actual drug class ( $\rho=.476$ ,  $p<.001$ ). However, this is still not perfect, as it shows there is still some level of disagreement between student's opinions and actual classification. This may be due to gaps in knowledge for a large proportion of participants, as Figure 1 shows 45% of students gave an incorrect answer. However, as shown by Figure 3, participants beliefs regarding current classification is similar to their views on what the classification should be.

H<sub>5</sub>: Mephedrone will not be considered safer than other illicit substances

This hypothesis found no support from the results of a Chi-squared test ( $\chi^2(3)=6.52$ ,  $p>.05$ ) showing mephedrone was not associated with concern for safety. This is in contrast to other illicit substances, such as cocaine, for which statistical analysis provided support for an associated between the drug and concerns for harm ( $\chi^2(4)=10.00$ ,  $p<.05$ ).

*Table 3. Concern regarding different drug use*

<b>Drug Type</b>	<b>Not at all</b>	<b>Barely Concerned</b>	<b>Mildly Concerned</b>	<b>Moderately Concerned</b>	<b>Highly Concerned</b>
<b>Cocaine</b>	2	1	5	8	9
<b>Mephedrone</b>	0	2	11	6	6

In support of the inferential test, as displayed in Table 3, there is a considerably larger number of people in the two highest concern groups for cocaine than mephedrone. Therefore, the experimental hypothesis must be rejected.

## **Chapter 5: Discussion**

### *Section 5.1: Introduction*

This study aimed to investigate students' attitudes towards the drugs classification system in the UK with regard to various illicit substances, as no such research currently exists. To do this, the researcher formulated five hypotheses to test, based on other previous relevant literature. Once the researcher had distributed questionnaires around the two university libraries, and subsequently collected containing respondents' answers, the data was analysed using Spearman's Rho and Chi-squared tests in SPSS. This chapter will discuss the implications of the findings resulting from the analysis, in terms of previous research and potential real-world applications. It will also highlight some of the issues that affect this study, and suggest methods for rectifying these in future research. Finally, the researcher will make suggestions for the directions of future research in this field, based on areas of interest that arose from this study, but beyond the scope of the current research project.

### *Section 5.2: Summary of Results*

This study aimed to establish students' attitudes towards the drug classification system in the UK with regard to different illegal substances. To do this, five main hypotheses were tested; the inferential tests for which revealed interesting findings from the data. First, a significant moderate correlation was found between perceived drug harm and preferred level of classification, providing the support required for the experimental hypothesis to be accepted. Secondly, the lack of a significant correlation between concerns regarding drug harm and actual drug classification enabled the second experimental hypothesis to be accepted. Thirdly, participants' attitudes towards cannabis appeared to change the least of any drug from examining the descriptive statistics. After analysing the relevant data via a Chi-squared test, this slight change in attitude was shown to be not statistically significant. Therefore, the second experimental hypothesis was accepted. Fourthly, Spearman's Rho revealed a significant moderate correlation between participants preferred drug class and actual drug class. As a result, the experimental hypothesis was rejected. Finally, a Chi-squared test revealed that there was no significant association between mephedrone and

concerns about the potential harm of the drug, when such an association was found between other illicit substances. Therefore, this experimental hypothesis was also rejected.

### *Section 5.3: Findings in Context*

The current study found that a significant negative moderate correlation existed between the beliefs student's held regarding harms and the class they believed that drug should be in; meaning as concerns regarding harm increased, so did the class participants deemed that drug to belong in. This is reassuring for the classification system as a whole, as it suggests that students agree with its premise, with regard to there being a graded approach to the severity of drug use, depending on the substance and its associated harm (Frank Advice, 2014). Further, findings from this study show some support for current legislation and classification structure, as students preferred drug class and actual class were significantly related. Having said this, the relationship, although significant, was not particularly strong. This may be due to knowledge on current legislation, as, across all conditions, participants' preferred and believed current classification were similar. Suggesting that some people are misinformed about current legislation and may be unaware that they are incorrect. This would make sense to an extent, as only 53% of respondents reported getting their information on drugs from official sources.

Current findings provide further support for those attained in from previous studies (Morgan et al., 2009; Nutt et al., 2007; Nutt et al., 2010). In the study conducted by Morgan et al., (2009) findings revealed a high correlation between drug experts and drug users' opinions on the harms of various illicit substances, but no such relationship between harm and drug classification. The current study adds to this, by finding for no such correlation existing in a student population. This is interesting as drug usage rates amongst the age groups that dominate this sample are between 17.8% and 18.2% (Home Office, 2016). This is likely to be considerably less exposure than the two populations previously studied, yet similar results have been achieved. However, though the usage rate may be less for the age groups corresponding with the current sample, there exists no data specifically relating to university students. Even so, these findings provide support for the argument that the classification system should be reviewed (House of Commons Science and Technology Committee, 2006).

This study found that participants' attitudes were changed the least when the drug being used in the scenario was cannabis. This is somewhat concurrent with government survey data (Home Office, 2016) showing attitudes towards cannabis use are most accepted in society. However, only 36% of those surveyed displayed acceptance towards cannabis use overall, though this could be as high as 44% when only considering the age group which this sample is predominantly comprised of (Home Office, 2016). Still, given 60% of the participants in the cannabis scenario are in favour of the drug being downgraded, it appears as though attitudes, among students at least, are more in line with those of the UK public from 2009 (Home Office, 2009), when the debate regarding the reclassification of cannabis was prevalent. To add further power to this argument, people's opinions were not affected by the length of time or frequency with which cannabis was being used. This suggests that, for cannabis at least, normalisation (Parker et al., 2002) may not be occurring, as this result suggest attitudes towards the drug's use would not change based on situation. If this is the case it provides more strength for the argument of cannabis being downgraded, as the views of students in this study appear genuine regardless of context.

Mephedrone was not associated with concerns of drug related harm, unlike other illegal substances such as cocaine. This appears to be contrary to the findings of Corazza et al. (2014), who found that 74.2% of participants thought the previously legal substance was no safer than other illegal drugs. However, only 48% of participants in the current study reported hearing of mephedrone before partaking in this research, meaning they may be less aware of harms associated with this drug than other drugs.

The fact that participants most commonly reported an accepting attitude towards drug use in the scenario across conditions is concurrent with the findings of Parker et al. (2002) and suggests the behaviour exhibited by the people in the vignettes is somewhat normalised. However, interestingly, participants in all drug conditions besides cannabis most commonly either reported being mildly or moderately concerned with the drug use in the vignette. Cannabis, on the other hand, was most commonly reported to cause no concern, reflecting the more accepting attitudes associated with the drug. This combined with the data for participants preferred classification further support the argument for the review of a the classification system; or as a bare minimum, support the opinion of David Nutt (BBC, 2010b) and the UK public at the time of cannabis' classification upgrade (Home Office, 2009).



Finally, with regard to participants' beliefs about the value ascribed to scientific data in policymaking, most participants across all groups believe policy is based on scientific evidence, with a large majority also believing other factors are considered. This is the first study to assess these types of attitudes, but the findings highlight how different attitudes between professional regulatory bodies and those not in such positions can be. For example, the House of Commons Science and Technology Committee (2006) agrees with Nutt et al. (2010); the classification system in the UK should be based on measures of harm that are more scientific. However, findings from the current study would suggest some public populations already believe this is the case, though this piece of research did not attempt to establish the extent to which participants thought this to be true.

#### *Section 5.4: Limitations*

Although the current research is important to gain an initial understanding of students views on the classification system it is not without its limitations. One such issue is that the researcher opted to use vignettes to overcome ethical issues regarding the nature of the questionnaire. However, in doing so, issues may have arisen with participants answers. For example, if drug use in the scenario described in the vignette was considered sensible by participants, their answers may have reflected this view rather than the view to the drug itself. Parker et al. (2002) who found that 'normalisation' was a common occurrence among the people involved in their study highlight this. The longitudinal study found that two thirds of young people held tolerant or accepting attitudes of drug taking behaviours and conclude that young Britons are becoming increasingly accepting of 'sensible' recreational drug use. In the current study, all vignettes portrayed an environment in which drug use would likely be considered recreational. Thus, it is possible that participants answers were influenced by the way the vignettes described the context in which the drug was being used. If this were the case, responses may reflect the views participants hold towards certain drugs being used in a particular scenario, as opposed to a more generic attitude towards that drugs usage.

This study was also limited by the sample size and number of drugs used. Because of the small number of participants, more sophisticated between group analyses could not be carried out limiting the investigative power of this research. In the same vein, the small

number of drugs included in this study is far from ideal, and more would need to be included to consider potential differences between drugs in the same class.

Another limitation of this study is that it uses a quantitative design. The use of predominantly closed questions prevent the researcher from gathering more in depth knowledge. Although this is useful for gauging attitudes initially, it does not allow for the collection of data to explain why these attitudes exist. Furthermore, the use of Likert scales restricts the scope for statistical analyses to less powerful non-parametric measures.

Finally, the current study was also limited from a generalisability perspective. As the sample consisted entirely of students answers may be considerably different overall from the rest of the population. If this were the case, the cause may be due to the relatively small age range that made up a large majority of the sample (96% aged 18-24) or the fact that students all have a similar level of education.

### *Section 5.5: Future Research*

Research into this particular area is still in its infancy; as such, there is considerable scope for future directions. However, the research will offer some guidance on where subsequent efforts should be focussed. Future research in this area is necessary to establish the reliability and validity of the current findings. Future studies may wish to focus on one drug, with vignettes describing different contexts in which said drug is being used, to establish the effect 'normalisation' (Parker et al., 2002) has, if any, on participants responses to items on the current questionnaire. Additionally, the difference between acceptance of drug use and concern for drug use should be investigated, and whether these vary depending on the context in which a drug is being used.

Moreover, a larger sample size and a greater number of drugs, potentially a list similar to that used in previous research (Morgan et al., 2009; Nutt et al., 2007) would provide much more generalizable data with much more scope for application.

In addition, this area may benefit greatly from further study into potential differences between age groups; indeed, if there was a difference, it may be worth investigating whether this is due to the society in which certain age groups grew up or whether attitudes change across the lifespan. Similarly, future studies should target different populations to gather

data from those with different educational backgrounds. Furthermore, future investigation should also aim to establish the extent to which these different groups believe the current classification system is based on empirical evidence and determine what other factors people believe goes into drugs policymaking.

Finally, future studies should also aim to assess the publics' attitude towards the schedule system outlined by the MDR. Given the limited evidence put forward in section 2.2 of this dissertation alone it seems as though the drugs discussed do not fit with the schedules they have been assigned. Though this topic was of considerable interest to the researcher, it was beyond the scope of the current study and would require a more sophisticated questionnaire design and a condensed, easy to understand, explanation of the drugs schedules. Additionally, it may prove difficult to give such a questionnaire to participants who are not aware of research into the potential therapeutic value of drugs without first making them aware of such research. However, this should be considered with caution, as it may be likely to be considered as leading the participant to agree with the research that is presented to them.

## **Chapter 6: Conclusion**

The aim of the present study was to investigate students' attitudes towards various illicit drugs in relation to the UK classification system. This research is important, and a necessary step to address the gap in the literature surrounding public opinion on drug laws in the UK, especially when this type of literature exists for other countries (Bullock, 2004). Drug laws are fast evolving, as can be seen by the advent of new acts to control substances as recently as 2016 (Psychoactive Substances Act 2016) as well as frequent modifications to existing acts. Yet, this area has avoided scientific interest thus far, with research instead focussing on prevalence rates and general attitudes (Home Office, 2016; Ormston et al., 2010). Even though studies most closely related to the current research focus on harm in

relation to drug classification, they fail to determine whether the participants seem to agree with current legislation or not (Morgan et al., 2009; Nutt et al., 2010).

The current study found support for drug harm being related to preferred drug classification in a sample of LJMU students, suggesting there is an agreement amongst this population that drugs considered more harmful should be subjected to tighter restrictions imposed by a higher classification. However, the lack of support found for a relationship between students' preferred class and actual class would suggest that although there is agreement with the premise of a classification system, there is discourse over which drugs are considered most harmful. This is of particular interest when the similarity between participants believed current classification and preferred classification is considered; as it not only suggests students are not knowledgeable about current drug laws, but they are unaware of this lack of knowledge.

In support of previous survey data, cannabis was found to be the most accepted drug out of the four tested in the current study. Although, in the present research acceptance levels were even greater than those measured previously (Home Office, 2016). Taken together with students' preferred drug class for cannabis, this would indicate a seemingly favourable view for the reclassification of cannabis to class C.

Though no support was found for mephedrone being considered equally harmful compared to other illicit drugs, more research needs to be conducted to determine the cause of this. As the researcher previously pointed out it may simply be because over half the sample had never heard of the drug prior to their engagement with this research. However, if this is not the case and the lack of association is due to the previously legal status of the drug there are serious implications for policy and education. If mephedrone, and by extension other previously legal substances, are arousing less concern due to their previously unclassified status it is highly likely that these drugs will be responsible for more harm. However, it should be noted that Corazza et al., (2014), do not support these findings, which suggests more research into this area is necessary.

Finally, the researcher has highlighted the issues affecting the current study and suggested approaches that may be used to amend them for future studies. Moreover, areas of interest for further investigation have also been highlighted. That being said, due to the stage research into this area is currently at, any further investigation is bound to provide valuable insight, and a base upon which more meaningful and applicable knowledge can be

built. Beyond this study, the suggestion has been made that any attempt to keep the classification of drugs in a political world strictly based on science will be inherently impossible, due to the element of subjectivity that must be incorporated to reflect current society (Kalant, 2010). This is exactly what the present study hopes to provide the first step to achieving; policy that serves its purpose as best it can for all its effects.

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## Appendices

### *Appendix 1: Cocaine questionnaire*

Nicholas is at a house party with a group of friends. Everyone is drinking alcohol and enjoying themselves. Nicholas then bumps into an old friend who he hasn't talked to in a couple of years and is offered some cocaine. They both take some and continue to enjoy the party.

Age:

Gender:

1. Have you heard of cocaine before?

Yes

No

2. Would you view Nicholas any differently after knowing they have taken cocaine?

1

2

3

4

5

(less positively)

(no different)

(more positively)

3. If you were Nicholas' friend, how much would their use of cocaine in the scenario above concern you?

1

2

3

4

5

(not at all)

(mildly concerned)

(highly concerned)

4. Does the length of time/frequency of cocaine use affect your opinion? Y/N

5. How aware are you that using cocaine may have harmful long-term effects on Nicholas' mental health?

1                      2                      3                      4                      5  
(very unaware)                      (unsure)                      (very aware)

6. How aware are you that using cocaine may have harmful long-term effects on Nicholas' physical health?

1                      2                      3                      4                      5  
(very unaware)                      (unsure)                      (very aware)

7. How concerned are you about these possible dangers to Nicholas' health? (physical or mental)

1                      2                      3                      4                      5  
(not at all)                      (mildly concerned)                      (highly concerned)

8. How do you find out information about cocaine?

*(Please tick all relevant answers)*

News (TV, Radio, Paper etc.)		Drug Agencies (Frank, drug abuse.gov etc.)	
Clubs		Friends/Family	
Other (please specify)			

Under the Misuse of Drugs Act 1971, illegal drugs are placed into one of 3 classes - A, B or C. This is broadly based on the harms they cause either to the user or to society when they are misused.

9. Please indicate which class you believe cocaine currently belongs in

A                      B                      C

10. Please indicate what class you believe cocaine should belong in

A                      B                      C

11. Do you believe that drugs policy in the UK is currently based on evidence from objective research?

Yes      No

12. Do you believe any factors other than those based on research influence the decision of which class a drug goes into?

Yes      No

*Appendix 2: Cannabis questionnaire*

Andy has been busy all week working and wants to relax in the evening. He arranges for 2 friends he hasn't seen in a couple of weeks to come around to catch up. When they arrive, everyone sits down to talk about their week and what's been going on since they saw each other whilst smoking cannabis.

Age:

Gender:

1. Have you heard of cannabis before?

Yes                      No

2. Would you view Andy any differently after knowing they have taken cannabis?

1                      2                      3                      4                      5  
(less positively)                      (no different)                      (more positively)

3. If you were Andy's friend, how much would their use of cannabis in the scenario above concern you?

1                      2                      3                      4                      5  
(not at all concerned)                      (mildly concerned)                      (highly concerned)

4. Does the length of time/frequency of cannabis use affect your opinion? Y/N

5. How aware are you that using cannabis may have harmful long-term effects on Andy's mental health?

1                      2                      3                      4                      5  
(very unaware)                      (unsure)                      (very aware)

6. How aware are you that using cannabis may have harmful long-term effects on Andy's physical health?

1                      2                      3                      4                      5

(very unaware)

(unsure)

(very aware)

7. How concerned are you about these possible dangers to Andy’s health? (physical or mental)

1  
(not at all)

2

3  
(mildly concerned)

4

5  
(highly concerned)

8. How do you find out information about cannabis?

*(Please tick all relevant answers)*

News (TV, Radio, Paper etc.)	<input type="checkbox"/>	Drug Agencies (Frank, drug abuse.gov etc.)	<input type="checkbox"/>
Clubs	<input type="checkbox"/>	Friends/Family	<input type="checkbox"/>
Other (please specify)			<input type="checkbox"/>

Under the Misuse of Drugs Act 1971, illegal drugs are placed into one of 3 classes - A, B or C. This is broadly based on the harms they cause either to the user or to society when they are misused.

9. Please indicate which class you believe cannabis currently belongs in

A

B

C

10. Please indicate what class you believe cannabis should belong in

A

B

C

11. Do you believe that drugs policy in the UK is currently based on evidence from objective research?

Yes      No

12. Do you believe any factors other than those based on research influence the decision of which class a drug goes into?

Yes      No

*Appendix 3: Mephedrone Questionnaire*

Luke is heading out for a night of clubbing with some friends. Usually they would take ecstasy on a night out but this time the group decide to try mephedrone, as it used to be legal for a time and is a lower-class drug than ecstasy which produces similar effects.

Age:

Gender:

1. Have you heard of mephedrone before?

Yes

No

2. Would you view Luke any differently after knowing they have taken mephedrone?

1

2

3

4

5

(less positively)

(no different)

(more positively)

3. If you were Luke's friend, how much would their use of mephedrone in the scenario above concern you?

1

2

3

4

5

(not at all)

(mildly concerned)

(highly concerned)

4. Does the length of time/frequency of mephedrone use affect your opinion? Y/N

5. How aware are you that using mephedrone may have harmful long-term effects on Luke's mental health?

1

2

3

4

5



(very unaware)

(unsure)

(very aware)

6. How aware are you that using mephedrone may have harmful long-term effects on Luke’s physical health?

1                      2                      3                      4                      5  
 (very unaware)                      (unsure)                      (very aware)

7. How concerned are you about these possible dangers to Luke’s health? (physical or mental)

1                      2                      3                      4                      5  
 (not at all)                      (mildly concerned)                      (highly concerned)

8. How do you find out information about mephedrone?

*(Please tick all relevant answers)*

News (TV, Radio, Paper etc.)	<input type="checkbox"/>	Drug Agencies (Frank, drug abuse.gov etc.)	<input type="checkbox"/>
Clubs	<input type="checkbox"/>	Friends/Family	<input type="checkbox"/>
Other (please specify)		<input type="checkbox"/>	

Under the Misuse of Drugs Act 1971, illegal drugs are placed into one of 3 classes - A, B or C. This is broadly based on the harms they cause either to the user or to society when they are misused.

9. Please indicate which class you believe mephedrone currently belongs in

A

B

C

10. Please indicate what class you believe mephedrone should belong in

A

B

C

11. Do you believe that drugs policy in the UK is currently based on evidence from objective research?

Yes

No

12. Do you believe any factors other than those based on research influence the decision of which class a drug goes into?

Yes

No

*Appendix 4: LSD questionnaire*

Peter and 4 of his friends have decided to get together one night to take LSD together. They all agree to meet at Peters' house at 2pm to take the drug together, with one person remaining sober to keep an eye on things. Everything goes smoothly and they all say they had an enjoyable experience.

Age:

Gender:

1. Have you heard of LSD before?

Yes

No

2. Would you view Peter any differently after knowing they have taken LSD

1

2

3

4

5

(less positively)

(no different)

(more positively)

3. If you were Peter friend, how much would their use of LSD in the scenario above concern you?

1

2

3

4

5

(not at all)

(mildly concerned)

(highly concerned)

4. Does the length of time/frequency of LSD use affect your opinion? Y/N

5. How aware are you that using LSD may have harmful long-term effects on Peter's mental health?

1                      2                      3                      4                      5  
(very unaware)                      (unsure)                      (very aware)

6. How aware are you that using LSD may have harmful long-term effects on Peter’s physical health?

1                      2                      3                      4                      5  
(very unaware)                      (unsure)                      (very aware)

7. How concerned are you about these possible dangers to Peter’s health? (physical or mental)

1                      2                      3                      4                      5  
(not at all)                      (mildly concerned)                      (highly concerned)

8. How do you find out information about LSD?

*(Please tick all relevant answers)*

News (TV, Radio, Paper etc.)		Drug Agencies (Frank, drug abuse.gov etc.)	
Clubs		Friends/Family	
Other (please specify)			

Under the Misuse of Drugs Act 1971, illegal drugs are placed into one of 3 classes - A, B or C. This is broadly based on the harms they cause either to the user or to society when they are misused.

9. Please indicate which class you believe LSD currently belongs in

A                      B                      C

10. Please indicate what class you believe LSD should belong in

A                      B                      C

11. Do you believe that drugs policy in the UK is currently based on evidence from objective research?

Yes                  No

12. Do you believe any factors other than those based on research influence the decision of which class a drug goes into?

Yes                  No

*Appendix 5:* Participant information sheet



**LIVERPOOL JOHN MOORES UNIVERSITY  
PARTICIPANT INFORMATION SHEET**

**Title of Project:** A study exploring students' attitudes towards various illicit substance use in relation to the UK drug classification system

**Name of Researcher and School/Faculty:** Matthew Williams/School of Law

You are being invited to take part in a research study. Before you decide it is important that you understand why the research is being done and what it involves. Please take time to read the following information. Ask us if there is anything that is not clear or if you would like more information. Take time to decide if you want to take part or not.

**1. What is the purpose of the study?**

This study aims to understand the views students of today hold about drugs and drug policy in the UK. The number of studies published of this nature is small and sometimes outdated. With drugs policy being a relatively rapid changing area in terms of new substances being made illegal and drug classifications changing, it is important that these studies reflect the view of people living in our society today. This research project is student lead.

**2. Do I have to take part?**

It is up to you to decide whether to take part or not. If you do you will be given this information sheet and asked to sign a consent form. You are still free to withdraw at any time and without giving a reason. A decision to withdraw will not affect your rights/any future treatment in any way.

**3. What will happen to me if I take part?**

- How long will I be involved? A couple of minutes, once you have answered all the questions you choose to answer on the questionnaire you are finished.

- How long will the research last? The project will be completely written up by the 7<sup>th</sup> April 2017
- What exactly will happen? You will receive an information sheet and consent form. After reading the information sheet and signing the consent form, they will be collected from you and you will be handed a questionnaire. You can choose to not give an answer for any question(s) you don't want to. Once you have completed the questionnaire it will be taken from you and kept separately from your consent form, so it will be impossible to know which questionnaire is yours and what answers you provided.

#### **4. Are there any risks / benefits involved?**

There are no intentional risks involved with this study, although it is possible that some people may find some questions upsetting, due to the nature of the study.

#### **5. Will my taking part in the study be kept confidential?**

Yes. You will complete the questionnaire anonymously. Once the questionnaires are collected they will be kept separately from the consent form you signed, making it impossible to know which questionnaire was completed by you.

**This study has received ethical approval from LJMU's Research Ethics Committee**  
*(insert REC reference number and date of approval)*

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S.C.Woods@ljmu.ac.uk

**Contact Details of Student Wellbeing:** counselling@ljmu.ac.uk

**If you have any concerns regarding your involvement in this research, please discuss these with the researcher in the first instance. If you wish to make a complaint, please contact [researchethics@ljmu.ac.uk](mailto:researchethics@ljmu.ac.uk) and your communication will be re-directed to an independent person as appropriate.**

*Appendix 6: Consent form*



**LIVERPOOL JOHN MOORES UNIVERSITY  
CONSENT FORM**

**Title:** A study exploring students' attitudes towards various illicit substance use in relation to the UK drug classification system.

**Name of Researcher:** Matthew Williams

**School/Faculty:** School of Law

1. I confirm that I have read and understand the information provided for the above study. I have had the opportunity to consider the information, ask questions and have had these answered satisfactorily
2. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving a reason and that this will not affect my legal rights.
3. I understand that any personal information collected during the study will be anonymised and remain confidential
4. I agree to take part in the above study

Name of Participant

Date

Signature



Name of Researcher

Date

Signature

*Appendix 7: Debrief sheet*

**LIVERPOOL JOHN MOORES UNIVERSITY** 

**DEBRIEFING SHEET**

Thank you for participating in this study.

I hope that this has given you an interesting insight into research regarding the drugs classification system in the UK.

The aim of the research was to establish whether students attitudes towards the classification of the drugs incorporated in this study were in line with the current legal classification of those drugs.

Your results and information will be kept secure, confidential and anonymous. As a result, it will be impossible for you to withdraw your results once they have been stored, as the researcher will have no way of knowing which results are yours.

If you wish to know the overall findings of the study or would like more information or to comment on your experience please feel free to contact me via email at: M.Williams1@2014.ljmu.ac.uk

**Thank you again for your participation**

*Appendix 8: Ethical approval confirmation*



12 December 2016

Matthew Williams

Dear Matthew

I am pleased to inform you that the Criminal Justice Programmes Ethics Panel has considered your application for your dissertation project and I am happy to confirm that it has been approved.

You should retain this notice and submit it in the appendix of your dissertation.

The Ethics Panel approval is given on the understanding that:

- (i) any adverse reactions/events which take place during the course of the project will be reported to the Panel immediately;
- (ii) any unforeseen ethical issues arising during the course of the project will be reported to the Panel immediately;
- (iii) any change in the protocol will be reported to the Panel immediately.

Please note that ethical approval is given for the academic year 2016-2017 and therefore the expiry date for this project will be 31<sup>st</sup> August 2017. An application for extension of approval must be submitted if the project continues after this date.

Yours sincerely,

Helena Gosling

Senior Lecturer in Criminal Justice

CC: Supervisor